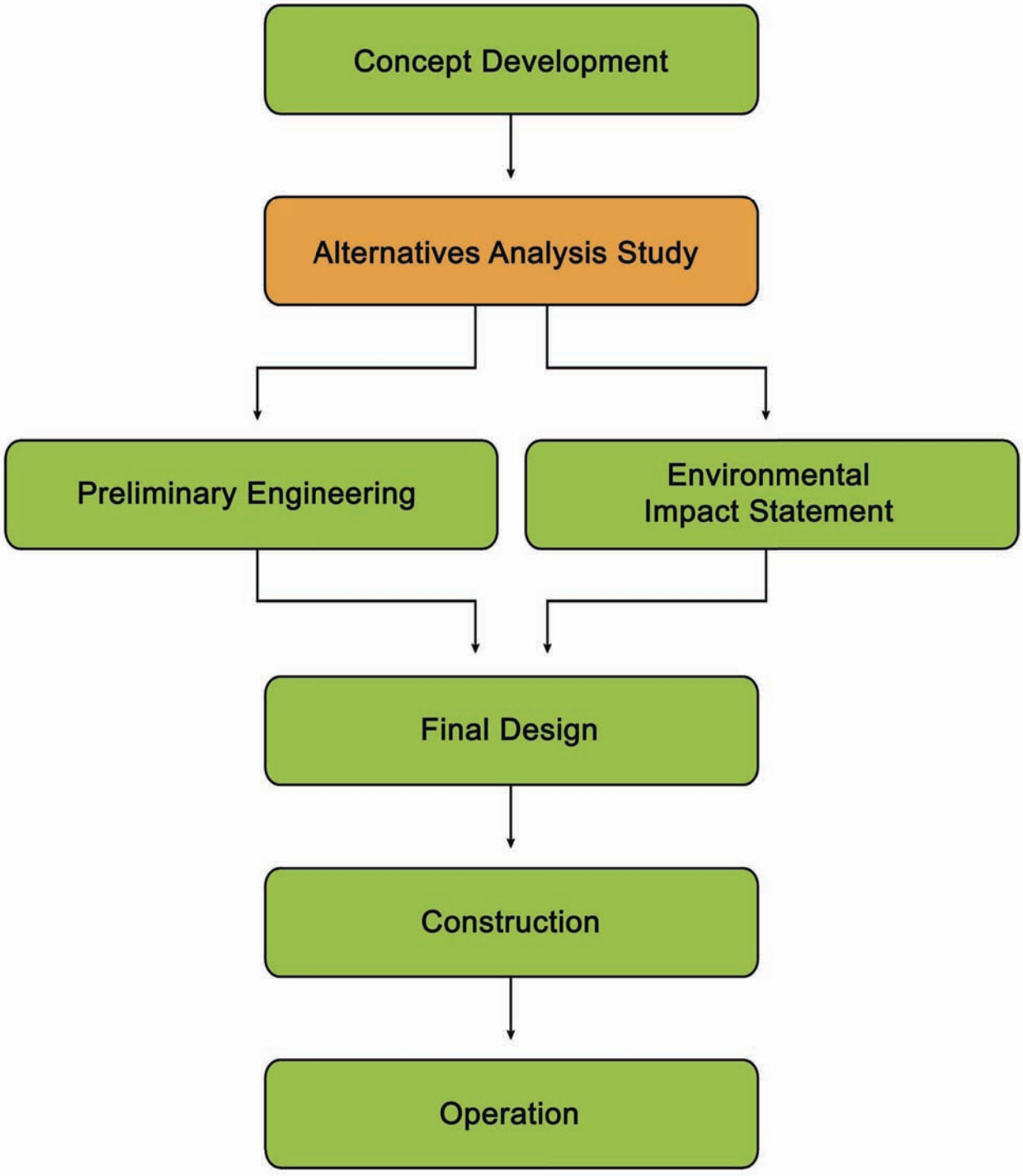
FTA's New Starts Process



Purpose and Need

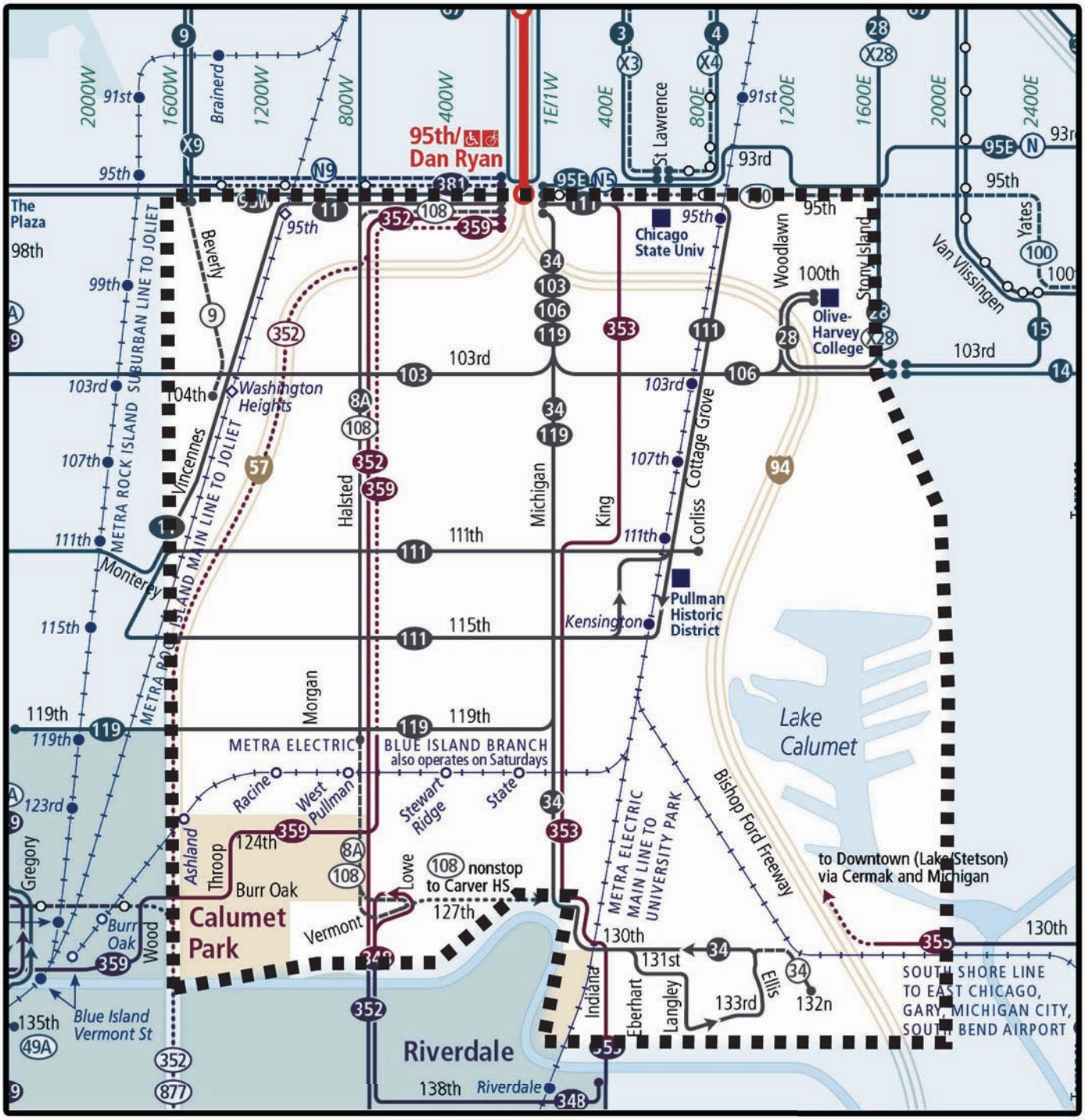
Transportation Needs

- Significant bus and passenger congestion at 95th Street Red Line Station
- Lengthy bus trips to access 95th Street Red Line Station
- Far South Area residents experience 20% longer commute than rest of City
- Traffic congestion is expected to grow along with study area population and employment

Opportunity for Improvement

- Extend rapid transit service south from 95th Street Red Line Station
- Improve access to, within, and beyond study area
- Stimulate economic development and job opportunities
- Shorten transit travel times through faster and more direct routings

Study Area



Red Line Extension
Alternative Analysis Study

Community Participation

Community participation is one of the key components of the alternatives analysis.

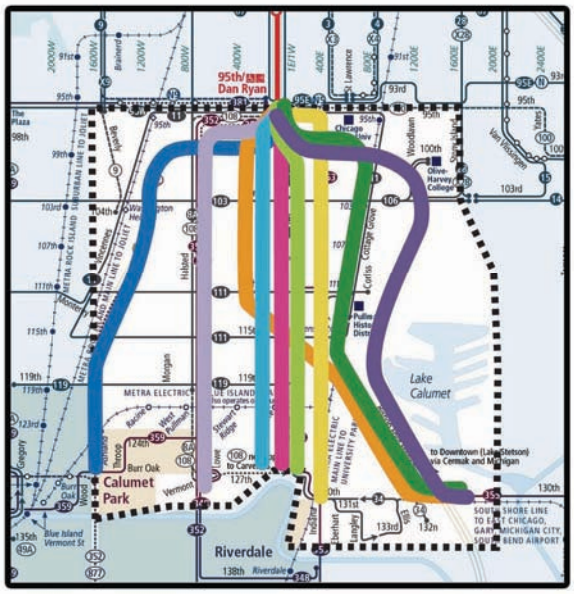
Community Outreach

- General Public
- Elected and Appointed Officials
- Community and Civic Organizations
- Faith-Based Organizations
- City and State Agencies

Ongoing Public Involvement/Input

- Meetings announced through public notices and advertisements
- Project updates on the CTA web site: www.transitchicago.com, accessible at local public libraries

Universe of Alternatives



Technologies

- Automated Guideway / Monorail
- Bus Rapid Transit
- Commuter Bus
- Commuter Rail
- Heavy Rail
- High Speed Rail
- Light Rail
- Local Bus
- MagLev
- Personal Rapid Transit
- Streetcar

Corridors

- I-57 Expressway
- Halsted Street
- UP Railroad
- Wentworth Avenue
- State Street
- Michigan Avenue
- King Drive
- Cottage Grove / Metra Electric
- I-94 Bishop Ford Freeway

Profiles

- Elevated
- At-Grade
- Trench
- Underground

Red Line Extension
Alternative Analysis Study

cta

SCREEN 3 - Step 1:

Alternatives Definition

Transportation System Management (Incorporates BRT)

Halsted Street to Vermont Avenue

At-Grade
No Exclusive Lanes
4 Stations / 5.1 Route Miles

Michigan Avenue to 130th Street

At-Grade
No Exclusive Lanes
4 Stations / 8.0 Route Miles

Corridors and stations and parking P are shown in generalized locations only.

SCREEN 3 - Step 1:

Alternatives Definition

Heavy Rail Transit

Halsted Street to Vermont Avenue

T Elevated
4 Stations / 5.0 Route Miles

UP Railroad to 130th Street

T Elevated
4 Stations / 5.3 Route Miles

Corridors and stations and parking P are shown in generalized locations only.

SCREEN 3 - Step 2

Evaluation Findings

Factor	Transportation System Management (Incorporates BRT)		Heavy Rail Transit	
Corridor	**Halsted Street to Vermont Avenue**	**Michigan Avenue to 130th Street**	**Halsted Street to Vermont Avenue**	**UP Railroad to 130th Street**
Profile	At-Grade No exclusive lanes	At-Grade No exclusive lanes	Elevated	Elevated
Physical Constraints	O	O	O	-
Public Support	O	O	O	+
Social / Economic	O	O	O	O
Environmental	O	O	O	O
Transportation	-	-	+	+
Capital Cost	+	+	O	O
Operating Cost	+	+	O	O
Ridership	O	O	+	+
Summary Rating	+1	+1	+2	+2
LPA Recommendation	NO	NO	YES	YES*

+ Better than other alternatives **O** Comparable to other alternatives **-** Worse than other alternatives

* Subject to separation distance/ROW availability and cost-effectiveness requirements

Preliminary Cost-Effectiveness Evaluation

FTA has cost-effectiveness thresholds

- Cost per hour of projected user benefits as measured by travel time savings.

Shorter versions of the HRT alternatives were investigated to see if the cost-effectiveness improved:

- HRT Halsted to 119th Street
- HRT UPRR to 115th Street

Initial results indicate up to 23% improvement in cost-effectiveness due to greater proportion of capital and O&M cost savings versus ridership reductions.

Factor *	HRT Halsted		HRT UPRR	
	Vermont Avenue	119th Street	130th Street	115th Street
Capital Costs (YOE)	$1,100M	$900M	$1,100M	$800M
O&M Costs (Annual)	$21M	$17M	$24M	$17M
Ridership (Annual)	11.6M	10.9M	12.7M	10.6M
YARD and Shop Costs (YOE)	$200M	$200M	$200M	$300M

The Halsted 119th Street alternative improves cost-effectiveness by 23%

The UPRR 115th Street alternative improves cost-effectiveness by 22%

* Costs and ridership figures as of June 2009

Preliminary Cost-Effectiveness Evaluation
Shortened Alignments

Heavy Rail Transit

Halsted Street to 119th Street

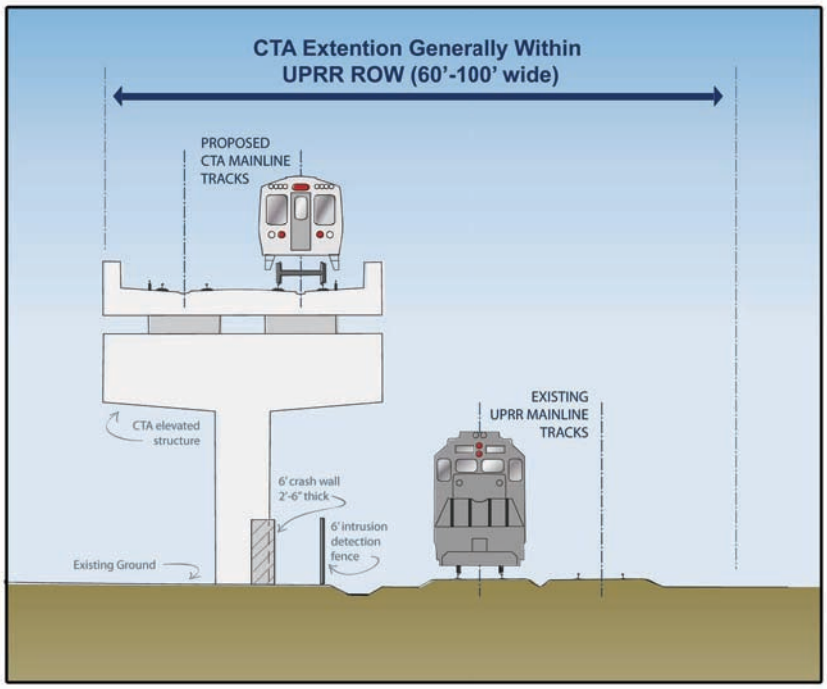
T Elevated
4 Stations / 3.8 Route Miles

UP Railroad to 115th Street

T Elevated
4 Stations / 3.3 Route Miles

Corridors and stations and parking P are shown in generalized locations only.

Freight Railroad & Transit Shared Use Corridor



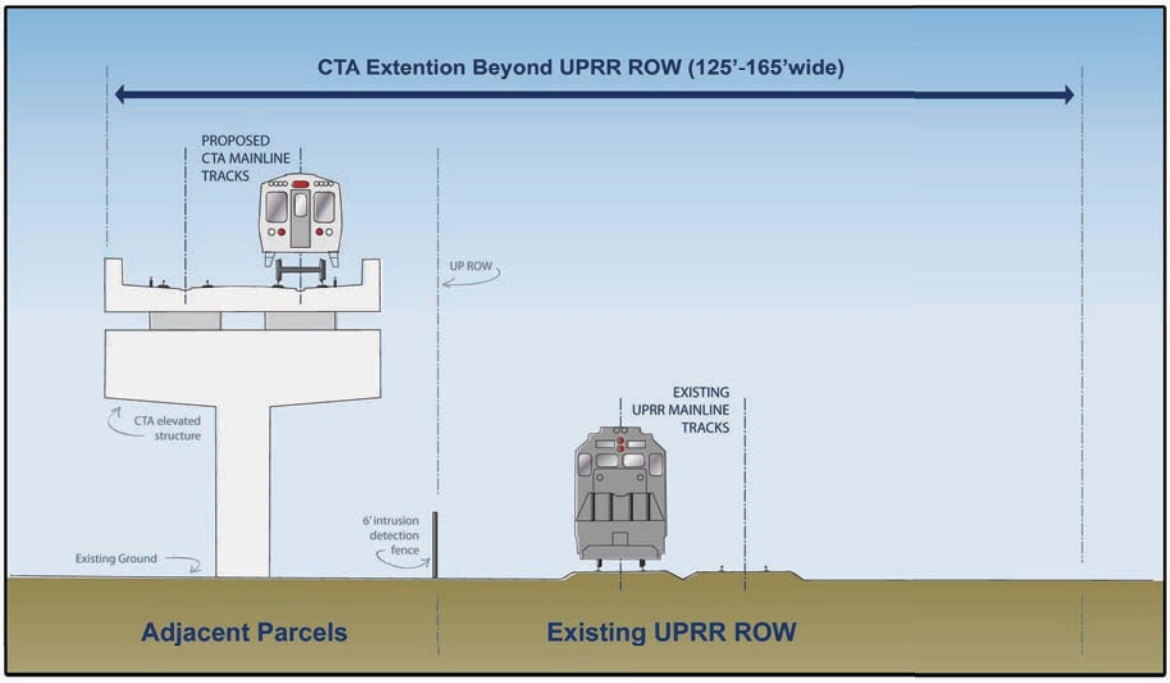
Physical Constraints

Freight Railroad & Transit Shared-Use Corridor

- Due to recent accidents, the transportation industry is adopting greater separation between freight railroad and transit operations for safety reasons
- For the HRT UPRR Elevated Alternative, 50-feet separation distance is desired

Right-of-Way Constraints

- UPRR needs entire right-of-way for operational purposes
- With additional separation distance, CTA extension will require adjacent property acquisition
- East and west alignments immediately adjacent to the UPRR right-of-way are being investigated



Red Line Extension
Alternative Analysis Study

SCREEN 3 - Recomendation:

Locally Preferred Alternative

Heavy Rail Transit

UP Railroad to 130th Street

T Elevated

4 Stations / 5.3 Route Miles

Corridors and stations and parking P are shown in generalized locations only.